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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,542	09/12/2003	Curtis Satoru Ikehara		6416

7590

11/29/2005

Curtis Ikehara  
99-603 Kaulainahee Place  
Aiea, HI 96701

EXAMINER
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AU, SCOTT D

ART UNIT	PAPER NUMBER
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2635

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/660,542	Applicant(s) IKEHARA ET AL.	
	Examiner Scott Au	Art Unit 2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The application of Ikehara et al. for an "Input device to continuously detect biometrics" filed September 12, 2003 has been examined.

Claims 1-13 are pending.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinsella (US# 6,914,517) in view of Kharon et al. (US# 6,487,662).

Referring to claims 1,2,3,5,7 and 11, Kinsella discloses an input device (603) (i.e. trackball pointing device) to continuously detect biometrics for facilitating continuous authentication of the user's identification based on input from sensors attached to the device comprising (col. 3 lines 15-20):  
a computer mouse (603) (i.e. trackball pointing device), for providing a base with sensors that indicate different pressures applied to the base by a user (col. 18 lines 23-25) at different buttons 1,2,3;

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an authentication computer (612) (i.e. computer verification engine), for receiving and analyzing data from the sensor electronics for registration and continuous authentication, electrically connected to said sensor electronics module (col. 19 lines 11-57);

a registration module (614) (i.e. interface controller), for initially linking the user's identity to the user's biometric characteristics, totally embedded to said authentication computer (612) (i.e. computer verification engine) (col. 19 lines 8-24; see Figure 14);

a biometric characteristics extractor, for extracting a set of biometric characteristics from the digitized signal (col. 19 lines 49-57);

a software identity database, for linking the user identity to the user's biometric characteristics in the database (col. 19 lines 49-57; see Figure 14);

a continuous authentication module, for continuously verifying that the identity of a user is authorized, algorithmically connected to said registration module, and totally embedded to said authentication computer (612) (i.e. computer verification engine) (col. 3 lines 15-20 and col. 20 lines 1-10);

a biometrics correlation unit, for matching a new set of biometric characteristics with the biometric characteristics in the identity database (col. 19 lines 55-67); and

an unauthorized user protocol, for changing the user's computer access (col. 11 lines 8-21 and col. 20 lines 15-67).

However, Kinsella did not explicitly disclose an electrical sensor electronics module, for conditioning the analog signal so that it can be converted into a digital signal, electrically connected to said computer mouse.

In the same field of endeavor of security system, Kharon et al. disclose an electrical sensor electronics module, for conditioning the analog signal so that it can be converted into a digital signal, electrically connected to said computer mouse (col. 8 lines 48-65; see Figure 4).

One ordinary skill in the art understands that an electrical sensor electronics module, for conditioning the analog signal so that it can be converted into a digital signal, electrically connected to said computer mouse of Kharon et al. is desirable in the security system of Kinsella because Kinsella discloses the biometric data is used as an input to a computer mouse for authorizing to use a computer system (col. 4 lines 40-64) and Kharon et al. suggest a A/D converter converting the fingerprint input and verifying the data through a microcontroller 150 (col. 8 lines 48-65). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include an electrical sensor electronics module, for conditioning the analog signal so that it can be converted into a digital signal, electrically connected to said computer mouse of Kharon et al. in the security computer system of Kinsella with the motivation for doing so would allow the biometric data to convert into digital data in order to compare.

Referring to claim 4, Kinsella discloses input device to continuously detect biometrics in accordance with claim 1, wherein said means for receiving and analyzing data from the sensor electronics for registration and continuous authentication comprises an authentication computer (col. 12 lines 8-19; see Figure 5).

Referring to claim 6, Kinsella in view of Kharon et al. disclose the input device to continuously detect biometrics in accordance with claim 1, Kinsella discloses wherein said means for extracting a set of biometric characteristics from the digitized signal comprises a biometric characteristics extractor (col. 19 lines 49-57).

Referring to claim 8, Kinsella in view of Kharon et al. disclose the input device to continuously detect biometrics in accordance with claim 1, Kinsella discloses wherein said means for continuously verifying that the identity of a user is authorized comprises a continuous authentication module (col. 20 lines 1-10).

Referring to claim 9, Kinsella in view of Kharon et al. disclose the input device to continuously detect biometrics in accordance with claim 1, Kinsella discloses wherein said means for matching a new set of biometric characteristics with the biometric characteristics in the identity database comprises a biometrics correlation unit (col. 19 lines 15-20).

Referring to claim 10, Kinsella in view of Kharon et al. disclose the input device to continuously detect biometrics in accordance with claim 1, Kinsella discloses wherein said means for changing the user's computer access comprises an unauthorized user protocol (col. 11 lines 15-35 and col. 19 lines 25-35).

Referring to claim 12, Kinsella in view of Kharon et al. disclose the input device to continuously detect biometrics as recited in claim 11, Kinsella discloses further

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comprising: a task computer, for providing the computer user access to a task, electrically connected to said authentication computer (col. 12 lines 8-20).

Referring to claim 13, Kinsella in view of Kharon et al. disclose the input device to continuously detect biometrics as claims 1 and 11, claim 13 is equivalent to that of claims 1 and 11 addressed above, incorporated herein. Therefore, claim 13 is rejected for same reasons given with respected to claims 1 and 11.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Matchett et al. (US# 5,229,764) disclose a continuous biometric authentication matrix.

Borza et al. (US# 5,991,431) disclose a mouse adapted to scan biometric data.

Brooks (US# 6,898,299) disclose a method and system for biometric recognition base on electric and /or magnetic characteristics.

Any inquiry concerning this communication or earlier communications form the examiner should be directed to Scott Au whose telephone number is (571) 272-3063. The examiner can normally be reached on Mon-Fri, 8:30AM – 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached at (571) 272-3068. The fax phone

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numbers for the organization where this application or proceeding is assigned are (571)-272-1817.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

Scott Au

A handwritten signature consisting of the letters 'S' and 'A' in a stylized, cursive font.

MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

A handwritten signature in cursive script, appearing to read 'Michael Horabik', written over the printed name and title.